



Expecting trouble

PANDORA study examines myriad problems for pregnant women with diabetes or its risk factors.
By Dallas Bastian

The outcomes for pregnant women in the Northern Territory with diabetes were the focus of a presentation at a conference held by the Australian Diabetes Society and the Australian Diabetes Educators Association. The presentation, delivered by Dr I-Lynn Lee, a PhD candidate with Menzies School of Health Research, focused on the preliminary results of the Pregnancy and Adverse Neonatal Diabetes Outcomes in Remote Australia (PANDORA) study, which aims to monitor relevant clinical outcomes for both the mothers and their babies, and provide reliable information around future health risk for the Northern Territory.

Lee said: "The preliminary results of this study have shown that Indigenous women who have diabetes in pregnancy are younger, less nulliparous, more likely to be smokers

and have high rates of Type 2 diabetes."

In the PANDORA study, 30 per cent of Indigenous women have Type 2 diabetes, compared with around 4 per cent of non-Indigenous women. "This is concerning as Type 2 diabetes is associated with poor maternal and fetal outcomes," Lee said.

"We also showed that Indigenous women were more likely to present later for their first antenatal visit," she added. "This is concerning, as the antenatal period is a crucial time to optimise the mother's health and an opportunity to detect undiagnosed pre-existing diabetes in pregnancy."

Lee said the PANDORA study also revealed that Indigenous women were more likely to require caesarean sections than non-Indigenous women, "but to note, in our analysis, after adjusting for their type



I-Lynn Lee

of diabetes, age, BMI, [whether they'd had children before] and remoteness, the risk between Indigenous and non-Indigenous women was similar. Hence Type 2 diabetes, and not ethnicity, is strongly associated with a higher risk for caesarean section."

The PANDORA study is the research arm of the NT Diabetes in Pregnancy Partnership. There are two other arms of this partnership. The first is a review of the current models of care to improve health service delivery for women with diabetes in pregnancy. The second is the development of a clinical register to maintain a current list of diabetes in pregnancy clients.

Lee said the results of the study would contribute to policy and clinical practice guidelines for the management of diabetes in pregnancy in the NT.

"By recognising that Indigenous women in pregnancy are younger and have high rates of Type 2 diabetes, midwives and GPs would be aware to screen for diabetes early in the course of their pregnancies," Lee explains. "Pre-pregnancy counselling is also encouraged in women with known [Type 2 diabetes mellitus]."

"Women who have risk factors for potential undiagnosed pre-existing diabetes in pregnancy should have screening in the form of HbA1c, random blood glucose or an early oral glucose tolerance test, so that optimal glycaemic control can be achieved early on in their pregnancies."

She added that advice should be given to women to optimise their health early in the pregnancy, such as smoking cessation and folate supplementation.

Lee said the study has also highlighted that preconception planning in women with pre-existing diabetes is extremely important and that women are advised to plan their pregnancy to ensure optimal maternal health.

The study will also be following up mothers with gestational diabetes and their risk of developing Type 2 diabetes, as it is higher. The babies will be followed up on to determine their risk of developing obesity and diabetes later in life.

"This work is still in progress," Lee says. "The PANDORA study is ongoing and the results will contribute to informing policy and clinical practice guidelines that will be developed to provide optimal care for the mothers and babies."